

Docket No: ICKINGER
Appl. No: 10/689,555

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Canceled)
2. (Currently amended) ~~[[The]]~~ An injection molding machine ~~of claim 1,~~
comprising:
at least one actuating drive constructed in the form of a spindle drive
having an electric motor, said spindle drive moving between a first end
position and a second end position and having an equilibrium position distal
from the end positions; and
a dual energy storage device operatively connected with the spindle
drive and receiving energy from the spindle drive in the first end position
and transferring energy to the spindle drive in the second end position, said
transferred energy boosting power of the electric motor,
wherein the dual energy storage device includes a first compression
spring arrangement and a second compression spring arrangement, which
acts in opposition to the compression spring of the first compression spring
arrangement.
3. (Original) The injection molding machine of claim 2, wherein at least one
the compression spring arrangements is implemented as a disk spring
assembly.

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4. (Currently amended) ~~[[The]]~~ An injection molding machine ~~of claim 1,~~
comprising:

at least one actuating drive constructed in the form of a spindle drive
having an electric motor, said spindle drive moving between a first end
position and a second end position and having an equilibrium position distal
from the end positions; and

a dual energy storage device operatively connected with the spindle
drive and receiving energy from the spindle drive in the first end position
and transferring energy to the spindle drive in the second end position, said
transferred energy boosting power of the electric motor.

wherein the electric motor has a rotor and the spindle drive has a
spindle nut connected to the rotor and a housing having a housing portion
for support of the electric motor, and further comprising a variable force
coupling mechanism operating in parallel with the dual energy storage
device and disposed between one member of the group selected of the
rotor and the spindle nut, and the housing portion.

5. (Original) The injection molding machine of claim 4, wherein the force
coupling mechanism includes an impulse-controlled releasable locking
device for the member.

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6. (Previously presented) The injection molding machine of claim 5, wherein the spindle drive is constructed for controlling a stroke of a plasticizing unit, wherein the locking device is constructed to automatically lock, when the plasticizing unit reaches end positions.
7. (Currently amended) ~~[[The]]~~ An injection molding machine ~~of claim 1,~~
comprising:
at least one actuating drive constructed in the form of a spindle drive
having an electric motor, said spindle drive moving between a first end
position and a second end position and having an equilibrium position distal
from the end positions;
a dual energy storage device operatively connected with the spindle
drive and receiving energy from the spindle drive in the first end position
and transferring energy to the spindle drive in the second end position, said
transferred energy boosting power of the electric motor, and
~~further comprising~~ an ejector for ejecting an injection-molded article,
wherein the spindle drive is constructed for pulsating actuation of the
ejector, and wherein the equilibrium location is approximately at a center
point of oscillation of the ejector.
8. (Original) The injection molding machine of claim 7, wherein the spindle
drive is constructed for selective locking of a retracted position of the
ejector.

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9. (Previously presented) The injection molding machine of claim 7, wherein the dual energy storage device and a moved mass of the actuating device form an oscillating system having a characteristic frequency, and wherein the electric motor has an excitation frequency which is tuned to the characteristic frequency.
10. (Original) The injection molding machine of claim 9, wherein the ejector includes an ejector plate and ejector rams, which are connected to the ejector plate for ejecting an injection-molded article, and wherein the spindle drive includes a spindle rod, which is connected to the ejector plate, and a spindle nut, which is connected to a rotor of the electric motor, said moved mass including the ejector plate, ejector rams, spindle rod and spindle nut.
11. (Original) The injection molding machine of claim 10, wherein the spindle nut is operatively connected with the spindle rod via rolling balls.